# DEPARTMENT OF THE AIR FORCE HEADQUARTERS AIR FORCE CIVIL ENGINEERING SUPPORT AGENCY TYNDALL AIR FORCE BASE FL 32403-6001

REPLY TO 11 MAR 1193

ATTN OF: EN

Subject: Engineering Technical Letter (ETL) 93-1,

Construction Signs

TO: Distribution List

1. Purpose. This letter provides the instructions and format for Air Force construction project signs. The construction project sign provides the project title and basic construction team information.

- 2. Application. This ETL supersedes CTL 88-3, 13 Jan 88; is effective immediately for new MILCON projects; and must be sent to all installations. The intent is not to change signs on projects already under contract nor to incur extra expense on projects under design simply to comply with this ETL.
- 3. Specific Requirements.
- 3.1 This construction sign is required for all MILCON projects. Exceptions may be made for security or host nation restrictions. Host MAJCOMs have the option to require signs on non-MILCON projects.
- 3.2 The host MAJCOM shall provide sign colors and details to the design manager in the Requirements and Management Plan (RAMP). The design manager shall ensure the design agent includes the details and contractor duties concerning the sign in the contract before project advertisement.
- 3.3 The contractor shall furnish the sign, maintain the sign during construction, and remove the sign from the job site upon completion of the project.
- 3.4 Details of sign graphics and construction are shown on the attached drawing (Atch 2). Construct the sign using a four-foot by eight-foot by one-half-inch thick (or metric equivalent), grade A-C sheet of exterior-type plywood.
- 3.5 Paint the sign with one coat primer paint followed by two coats of gloss exterior-type enamel paint according to a color number specified in Federal Standards 595a. Lettering is to be as shown on attachment 2 and is to be white gloss, exterior-type enamel.

- 3.6 The message and graphic shall be as shown in attachment 2 with the following exceptions as they apply:
- $3.\,6.\,1$   $\,$  Projects managed by the Navy should substitute "NAVAL FACILITIES ENGINEERING COMMAND" for line  $3.\,$
- 3.6.2 The appropriate, similar size, Navy seal may be used at the location of the Corps of Engineers graphic.
- 4. The point of contact for this ETL is Mr Rick Sinkfield, AFCEE/CMR, 512-536-4188 or DSN 240-4188.

DENNIS M. FIRMAN, P.E. Director, Systems Engineering

- 3. Atch
- 1. Distribution List
- 2. Drawing
- 3. ETL Index

#### DISTRIBUTION LIST

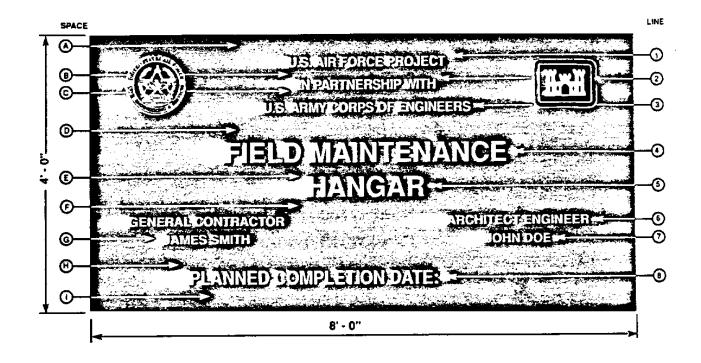
### AIR FORCE

HQ AFMC/CEC 4225 Logistics Ave Wright-Patterson AFB OH 45433-5	(3) 5006	HQ USAFA/CEE 8120 Edgerton Dr, Suite 40 USAF Academy CO 80840-2400	(1)
HQ AFRES/CEM 155 2nd Street Robins AFB GA 31098-1635	(2)	1100 CES/CEM 1 McChord Street, Suite 208 Bolling AFB DC 20332-5109	(2)
HQ ATC/CEM Bldg 661, 73 Main Circle Randolph AFB TX 78150-4549	(3)	AFIT/DEE 2950 P Street Wright-Patterson AFB OH 45433-776	(1) 5
HQ PACAF/CEM 25 E Street, Suite D-302 Hickam AFB HI 96853-5412	(3)	HQ ACC/CEM 129 Andrews Street, Suite 346 Langley AFB VA 23665-2769	(3)
HQ USAFE/CE0 Unit 3050, Box 10 APO AE 09094-5001	(3)	AFSOC/DE Bldg T-206, 301 Cody Ave Hurlburt Field FL 32544-5273	(1)
CETSO/ESOF 11817 Canon Boulevard, Suite 500 Crestar Bank Building Newport News VA 23606-2558	(1)	HQ USAF/CEC 1260 Air Force Pentagon Washington DC 20330-1260	(1)
HQ AMC/CES 507 A Street Scott AFB IL 62225-5022	(3)	ANGRC/CEO Bldg 3500, Mail Stop 18 Andrews AFB MD 20331-6008	(2)
HQ AFSPACECOM/CEO 150 Vandenberg Street, Suite 1105 Peterson AFB CO 80914-4150	(3)	AFCEE/CM/DG 8106 Chennault Road Brooks AFB TX 78235-5318	(2)
HQ AU/DEE 400 Cannot Street Maxwell AFB AL 36112-6523	(1)	7CG/XPGF 6345 Air Force Pentagon Washington DC 20330-1600	(1)
HQ AFIC/LEE Bldg 2000, Room 643	(1)	HQ AFMWSRA/MWXF Randol ph AFB TX 78150-6001	(1)
San Antoni o TX 78243-5000		HQ AF Safety Agency/ SEGS Norton AFB CA 92409-7001	(1)
HQ AFCC/CEM 203 W Losey Street, Rm 1020 Scott AFB IL 62225-5219	(2)	HQ AFOMS/SGS Brooks AFB TX 78235-5000	(1)
NGB/CEP Room 2D369, The Pentagon Andrews AFB MD 20310-2500	(1)	HQ AF Inspection Agency/IGSE Norton AFB CA 92409-7001	(1)
SSC/SBEE 201 East Moore Drive (Gunter Anna Maxwell AFB FL 36114-3005	(1) ex)	HQ AFOTEC/DE 8500 Gibson Boulevard SE Kirtland AFB NM 87117-5558	(1)

### DISTRIBUTION LIST (Con't)

#### ARMY

US Army Corps of Engineers Sacramento District AF Project Management 1325 "J" Street Sacramento CA 95814-2922	(1)	Chi ef of Engineers Department of the Army Attn: CEMP-F. A 20 Massachusetts Ave Washi ngton DC 20314-1000	(2)
NAVY			
Navy Facilities Engrg Command Northern Division Code O4AB 10 Industrial Highway Mail Stop Lester PA 19113-2090	(1) 82	Naval Facilities Engrg Command Chesapeake Division Code 406C Washington Navy Yard, Bldg 212 Washington DC 20374-2121	(1)
Naval Facilities Engrg Command Atlantic Division Code 04A4 Norfolk VA 23511-6287	(1)	Naval Facilities Engrg Command Southern Division Code 04A3 PO Box 190010 North Charleston SC 29419-9010	(1)
Naval Facilities Engrg Command Western Division Code 467.1 PO Box 727 San Bruno CA 94066-0720	(1)	Naval Facilities Engrg Command Pacific Division Code 406A Pearl Harbor HI 96860-7300	(1)
Naval Facilities Engrg Command Southwest Division Code 0406 1200 Pacific Highway San Diego CA 92132-5190	(1)		
DEPARTMENT OF DEFENSE			
Defense Medical Facilities Off Skyline Place #6, Suite 817 5109 Leesburg Pike Falls Church VA 22041	(1)	DTIC ATTN: DTIC-FDA Alexandria VA 22304-6145	(1)
AAFES/ATTN: CFE PO BOX 660320 Dallas TX 75266-0320	(1)	Defense Commissary Service Director of Facilities Bldg 8400 Lackland AFB TX 78236-5000	(1)
SPECIAL INTEREST ORGANIZATIONS			
IHS (A.A. Desmoine) 1990 M Street NW, Suite 400 Washington DC 20336	(1)	Construction Criteria Database National Institute of Bldg Science 1201 L Street NW, Suite 400 Washington DC 20005	(1) es



# SAMPLE CONSTRUCTION SIGN FOR MILCON PROJECTS SCHEDULE

SPACE	HEIGHT	LINE	DESCRIPTION	LETTER HEIGHT	STROKE
A	3"	1	U.S. AIR FORCE PROJECT	1.5"	3/16"
В	1"	2	IN PARTNERSHIP WITH	1.5"	3/16"
С	1"	3	U.S. ARMY CORPS OF ENGINEERS	1.5"	3/16"
D	5"	4	PROJECT NAME	4"	1/2"
E	3"	5	PROJECT NAME CONTD (IF REQUIRED)	4"	1/2"
F	5"	6	GENERAL CONTRACTOR/A-E	1.5"	3/16"
G	1"	7	GENERAL CONTRACTOR /A-E	1.5"	3/16"
н	4"	8	PLANNED COMPLETION DATE	2.5"	1/4"
1	3"				

### ENGINEERING TECHNICAL LETTERS (ETL)

### SECTION A - CURRENT ETLS

ETL	Number	Ti tl e	Dat	te Is	ssued
	82-2 83-1	Energy Efficient Equipment Design of Control Systems for HVAC Change No. 1 to ETL 83-1, U.S. Air Force Standardized Heating, Ventilating		Nov Feb	
		& Air Conditioning (HVAC) Control Systems	22	Jul	87
	83-3	Interior Wiring Systems, AFM 88-15 Para 7-3	2	Mar	83
	83-4	EMCS Data Transmission Media (DTM) Considerations	3	Apr	83
	83-7	Plumbing, AFM 88-8, Chapter 430 Aug 83			
	83-8	Use of Air-to-Air Unitary	15	Sep	83
	83-9	Insulation		Nov	
	84-2	Computer Energy Analysis		Mar	
		Change 1 Ref: HQ USAF/LEEEU Msg			
		031600Z MAY 84	1	Jun	84
	84-7	MCP Energy Conservation Investment	-		
		Program (ECIP)	13	Jun	84
	84-10	Air Force Building Construction and		<b></b>	•
	• • • • • • • • • • • • • • • • • • • •	the use of Termiticides	1	Aug	84
	86-2	Energy Management and Control Systems	-	9	•
	00 2	(EMCS)	5	Feb	86
	86-4	Paints and Protective Coatings		May	
	86-5	Fuels Use Criteria for Air Force		way	00
	00 0	Construction	22	May	86
	86-8	Aqueous Film Forming Foam Waste		may	
	00 0	Discharge Retention and Disposal	14	Jun	86
	86-9	Lodging Facility Design Guide		Jun	
	86-10	Anti terrori sm Planni ng and	•	Juii	00
	00 10	Desi gn Gui dance	13	Jun	86
	86-14	Solar Applications		0ct	
	86-16	Direct Digital Control Heating		001	00
	00 10	Ventilation and Air Conditioning Systems	9	Dec	86
	87-1	Lead Ban Requirements of Drinking Water		Jan	
	87-2	Volatile Organic Compounds		Mar	
	87-4	Energy Budget Figures (EBFs) for	•	war	0,
	0, .	Facilities in the Military Construction			
		Program	13	Mar	87
	87-5	Utility Meters in New and Renovated		war	0,
	0, 0	Facilities	13	Jul	87
	87-9	Prewi ri ng		0ct	
	88-2	Photovol taic Applications		Jan	
	88-3	Design Standards for Critical Facilities		Jun	
	88-4	Reliability & Maintainability (R&M)	. 5	Jan	55
		Design Checklist	24	Jun	88
	88-6	Heat Distribution Systems Outside of		J 411	55
		Buildings	1	Aug	88
			•	, . <b></b> .y	50

### ENGINEERING TECHNICAL LETTERS (ETL)

### SECTION A - CURRENT ETLS

ETL	Number	Ti tl e	Date	Issued
	88-9	Radon Reduction in New Facility		
		Construction	7 Oc	t 88
	88-10	Prewired Workstations Guide Specification	29 De	c 88
	89-2	Standard Guidelines for submission of		
		Facility Operating and Maintenance Manuals	23 Ma	y 89
	89-3	Facility Fire Protection Criteria for		
		Electronic Equipment Installations	9 Ju	n 89
	89-4	Systems Furniture Guide Specification	6 Ju	I 89
	89-6	Power Conditioning and Continuation		
		Interfacing Equipment (PCCIE) in the		
		Military Construction Program (MCP)	7 Se	
	89-7	Design of Air Force Courtrooms	29 Se	p 89
	90-1	Built-Up Roof (BUR) Repair/Replacement		
		Gui de Speci fi cati on	23 Ja	n 90
	90-2	General Policy for Prewired Workstations		
		and Systems Furniture	26 Ja	n 90
	90-3	TEMPEST Protection for Facilities		
		Change 1 Ref: HQ USAF/LEEDE Ltr	20 1-	00
	00.4	dated 20 April 90, Same Subject	20 Ap	r 90
	90-4	1990 Energy Prices and Discount Factors	24 Ma	v 00
	90-5	for Life-Cycle Cost Analysis Fuel and Lube Oil Bulk Storage Capacity	24 IVIA	y 90
	70-3	for Emergency Generators	26 Ju	1 90
	90-6	Electrical System Grounding, Static	20 Ju	1 70
	70-0	Grounding and Lightning Protection	3 00	t 90
	90-7	Air Force Interior Design Policy	12 Oc	
	90-8	Gui de Speci fi cati ons for Ethyl ene		• / •
		Propyl ene Di ene Monomer (EPDM) Roofing	17 Oc	t 90
	90-9	Fire Protection Engineering Criteria for		
		Aircraft Maintenance, Servicing, and		
		Storage Facilities	2 No	v 90
	90-10	Commissioning of Heating, Ventilating, and		
		Air Conditioning (HVAC) Systems Guide		
		Speci fi cati on	17 Oc	t 90
	91-1	Fire Protection Engineering Criteria		
		Testing Halon Fire Suppression Systems	2 Ja	n 91
	91-2	High Altitude Electromagnetic Pulse (HEMP)		0.4
	01 0	Hardening in Facilities	4 Ma	
	91-3	Water Supply for Fire Protection Site Selection Criteria for Fire Protection	14 Ju	n 91
	91-4	Training Areas	14 1	n 01
	91-5	Fire Protection Engineering Criteria -	14 Ju	11 71
	91-5	Emergency Lighting and Marking of Exits	18 Ju	n 01
	91-6	Cathodic Protection	3 Ju	
	, i G	outhour of it otooti on	5 Ju	. /!
				Atch 3
				2 of 3)
			`	•

### ENGINEERING TECHNICAL LETTERS (ETL)

## SECTION A - CURRENT ETLS

ETL	Number		Title	Date Issued
	91-7		orocarbon (CFC) Limitation in Ventilating and Air-conditioning stems	21 Aug 91
	93-1	Constructi		11 Mar 93
		SECTI	ON B - OBSOLETE ETLS	
	No.	Date	Status	
	82-1	10 Nov 82	Superseded by ETL 83-10, 86-1, 87-4	
	82-3	10 Nov 82	Superseded by ETL 83-5, 84-2	
	82-4	10 Nov 82	Superseded by ETL 84-7	
	82-5	10 Nov 82	Superseded by ETL 84-1, 86-13, 86-14	
	82-6	30 Dec 82	Cancelled	
	82-7	30 Nov 82	Cancel Led	
	83-2	16 Feb 83	Superseded by ETL 84-3	
	83-5	5 May 83	Superseded by ETL 84-3	
	83-6	24 May 83	Cancelled	
	83-10	28 May 83		
	84-1	18 Jan 84	Superseded by ETL 86-1	
	84-3	21 Mar 84	Superseded by ETL 86-14 Cancelled	
	84-4			
	84-5	10 Apr 84	Superseded by ETL 86-7, 86-15, 87-5	00 4
	84-6	7 May 84 Not Issued	Superseded by ETL 84-8, 86-11, 86-18, Cancelled/Not Used	00-0
	84-8	19 Jun 84		
	84-9	5 Jul 84	Superseded by ETL 86-11 Superseded by ETL 88-7	
	88-5	2 Aug 88	Superseded by ETL 91-6	
	86-1	3 Feb 86	Superseded by ETL 97-0 Superseded by ETL 87-7	
	86-3	21 Feb 86	Superseded by ETL 86-4	
	86-6	3 Jun 86	Superseded by ETL 86-11, 86-18, 88-6	
	86-7	3 Jun 86	Superseded by ETL 86-15	
	86-11	3 Jul 86	Superseded by ETL 88-6	
	86-12	3 Jul 86	Superseded by ETL 90-2	
	86-13	18 Aug 86	Superseded by ETL 86-14	
	86-15	13 Nov 86	Superseded by ETL 87-5	
	86-17	17 Dec 86	Superseded by ETL 89-6	
	86-18	18 Dec 86	Superseded by ETL 88-6	
	87-3	12 Mar 87	Superseded by ETL 87-6, ETL 88-5	
	87-6	21 Aug 87	Superseded by ETL-88-5	
	87-7	14 Oct 87	Superseded by ETL 89-1	
	87-8	19 Oct 87	Superseded by ETL 90-1	
	88-1	5 Jan 88	Superseded by ETL 89-2	
	88-7	24 Aug 88	Superseded by ETL 90-3, ETL 91-2	
	88-8	4 Oct 88	Superseded by ETL 90-3, ETL 91-2	
	89-1	6 Feb 89	Superseded by ETL 90-4	
	89-5	0 100 07	Issued as ETL 90-7	
	91-8	24 Sep 91	Cancel Led	
		cop /.	3333.134	A+ab 2

Atch 3 (3 of 3)